



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,666	01/18/2002	Scott P. Crafton	C152 1150	1166

7590

11/23/2004

WOMBLE CARLYLE SANDRIDGE & RICE
P.O. Box 7037
Atlanta, GA 30357-0037

EXAMINER

KASTLER, SCOTT R

ART UNIT	PAPER NUMBER
----------	--------------

1742

DATE MAILED: 11/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/051,666

Applicant(s)

CRAFTON ET AL.

Examiner

Scott Kastler

Art Unit

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 32-67 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 32-67 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11-12-2004 has been entered.

Claim Objections

Claims 32-34, 43-45, 55, 56, 66 and 67 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The above claims recite only specific temperatures at which the claimed apparatus is to be operated and therefore constitute only limitations dealing with the manner or method in which the claimed apparatus is to be employed. It has been well settled that the manner or method of use of an apparatus cannot be relied upon to fairly further limit claims to the apparatus itself. See MPEP 2114 and 2115 as well as *In re Casey*, 152 USPQ 235.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-3 and 32-34 are rejected under 35 U.S.C. 102(a) as being anticipated by Pollkoetter. Pollkoetter teaches a metal processing facility including a pouring station (11), a heat treatment unit (see col. 4 lines 33-40 for example, where a heat treatment station is located at section 57), and an intermediate transfer system including a heat source (54) including heating elements, which can be controlled by turning on and off for example, for maintaining the castings at a “process temperature” (where the process temperature is a) not defined and b) would be at best, a suggested use of the claimed apparatus and therefore not properly further limiting), which meets the requirements of the “process temperature control station” as well as a mechanized arm (55) for transferring the castings from the pouring station to the heat treatment station, thereby showing all aspects of the above claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9 and 32-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pollkoetter in view of the ASM Handbook, Vol. 4. As applied to claims 1-3 above, Pollkoetter shows all aspects of the above claims except the use of any particular heat treatment furnace type or arrangement, or the use of a "process temperature control chamber" for adjusting the temperature of the castings prior to entry into the heat treating furnace, although Pollkoetter allows for the use of any desired heat treatment furnace type, including those with pre-heating chambers ("process temperature control chambers"). The ASM handbook, Vol. 4 pages 465-474, teaches that at the time the invention was made, heat treatment furnaces meeting all requirements of the instant claims, including the use of heat treatment baskets for holding the castings (see fig. 4 on page 467 for example), pre-heating chambers (which meet the definition of "process temperature control chambers", see Fig. 9 page 470 for example) as well as the use of any of radiant heating means, burners or convection heaters (see pages 471-473 for example). Applicant has not yet shown any new or unexpected results arising from the use of any particular heat treating furnace arrangement as long as the arrangement is sufficient to heat treat the castings. Because Pollkoetter requires the use of some unspecified type of heat treating furnace, motivation to employ any of the numerous known equivalent heat treating furnace arrangements disclosed by the ASM Handbook, Vol.4, including those with preheating, or process temperature control chambers, would have been a modification obvious to one of ordinary skill in the art at the time the invention was made.

Response to Arguments

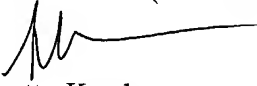
Applicant's arguments filed on 11-12-2004 have been fully considered but they are not persuasive. Applicant's argument that the heat source (54) of Pollkoetter does not function in the same manner as the heating furnace of the instant claims (i.e. controlling the temperature to the recited temperatures or permitting the molten metal of the castings to solidify) is not persuasive because all of the instantly rejected claims are apparatus claims, and the manner or method of use of an apparatus (in the instant case the operation of the heater (54) of Pollkoetter at any specific temperature) cannot be relied upon to fairly further distinguish claims to the apparatus itself. See *In re Casey*, 152 USPQ 235 and MPEP 2114. Therefore, as described in the above rejections, since Pollkoetter teaches a pouring station (11), a heat treatment unit (at 56 as described at col. 4 lines 33-40) a transfer system and a heat source (54) all of which would be capable of performing the instantly recited functions, even though these functions may not be specifically described by Pollkoetter, Pollkoetter fairly shows or fairly suggests all aspects of the above claims. Also. Applicant's argument that Pollkoetter does not teach or suggest a controller for controlling the amount of heat applied is not persuasive because at it's broadest, this limitation would be met by simply turning the heater of Pollkoetter on and off, and further, Pollkoetter teaches employing the heater for treatment at desired temperatures (see col. 4 lines 28-45 for example) thereby inherently disclosing a controller for controlling the temperature of the heater and the castings being treated.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Kastler whose telephone number is (571) 272-1243. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Scott Kastler
Primary Examiner
Art Unit 1742

sk